WHAT IS CLAIMED IS:

1. An anti-wrinkle composition comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):

$$R_{1} = X + \begin{pmatrix} 0 \\ C \\ C \end{pmatrix} + \begin{pmatrix} C \\ R_{2} \end{pmatrix} + \begin{pmatrix} C \\ R_{3} \end{pmatrix} + \begin{pmatrix} C \\ R_{2} \end{pmatrix} + \begin{pmatrix} C \\ R_{3} \end{pmatrix} + \begin{pmatrix} C \\ R_{3} \end{pmatrix} + \begin{pmatrix} C \\ R_{4} \end{pmatrix} + \begin{pmatrix} C \\ R_{3} \end{pmatrix} + \begin{pmatrix} C \\ R_{4} \end{pmatrix} +$$

- X is chosen from –O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals,
 - R₁ is chosen from:
 - (i) hydrogen,
- (ii) linear and branched, saturated and unsaturated C_1 - C_{40} hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R", wherein R' and R" are chosen, independently of each other, from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals; the C_1 - C_{40} hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and
 - (iii) a radical chosen from

in which:

- m is 1, 2, 3, 4 or 5;

- s is an integer between 0 and 4 inclusive;
- R₄ is chosen from hydrogen, -NH₂, -OH, -SH, -CHOHCH₃, -CONH₂,

$$-NH-C$$
 NH_2
 NH_2

- R_2 is chosen from hydrogen, linear and branched, saturated and unsaturated C_1 - C_8 hydrocarbon-based radicals, and a radical chosen from – CH_2OH , -CHOH- CH_3 , - $CH_2C_6H_5$, - $CH_2C_6H_4$ p-OH and –(CH_2)_t- NH_2 , with t being 1, 2, 3, 4 or 5,
- R_3 is chosen from hydrogen, and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals, and
- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.
 - 2. The composition of claim 1, wherein X is chosen from O, S and N-CH₃.
- 3. The composition of claim 1, wherein R_1 is chosen from hydrogen, linear and branched, saturated and unsaturated C_1 - C_{22} hydrocarbon-based radicals, and a radical chosen from:

4. The composition of claim 3, wherein R_1 is a C_4 - C_{20} hydrocarbon-based radical.

- 5. The composition of claim 1, wherein R_2 is chosen from hydrogen, linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals, and - $CH_2C_6H_4p$ -OH.
- 6. The composition of claim 1, wherein R_3 is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_4 hydrocarbon-based radicals.
- 7. The composition of claim 6, wherein R₃ is chosen from methyl and ethyl radicals.
 - 8. The composition of claim 1, wherein R_1 is chosen from:

C₁₆H₃₃-

$$-(\mathrm{CH_2})_4 - \mathrm{CH-COOH} \\ \mathrm{NH_2} \\ -\mathrm{CH_2-CH-COOH} \\ \mathrm{NH_2}$$

$$R_1 = H_2N - C - NH - (CH_2) \frac{1}{3}CH - COOH$$

$$R_1 = HN \longrightarrow CH_2 - CH \longrightarrow COOH$$

$$R_1 = NH_2 - C - (CH_2) \frac{}{3} CH - COOH$$

, and

CH₂(OH)-CH(OH)-CH(OH)-CH(OH)-CH₂-.

9. The composition of claim 1, wherein n is between 3 and 500 inclusive.

- 10. The composition of claim 1, wherein n is such that the weight average molecular weight of the at least one material is between 300 and 50 000 inclusive.
- 11. The composition of claim 1, wherein the at least one material is present, alone or as a mixture, in an amount of from 0.001% to 30% by weight relative to the total weight of the composition.
- 12. The composition of claim 11, wherein the at least one material is present, alone or as a mixture, in an amount of from 0.01% to 15% by weight relative to the total weight of the composition.
- 13. The composition of claim 1, wherein the physiologically acceptable medium comprises a cosmetically acceptable medium.
- 14. The composition of claim 1, wherein the physiologically acceptable medium comprises a pharmaceutically acceptable medium.
- 15. The composition of claim 1, further comprising tensioning agents chosen from proteins, protein hydrolysates, and nucleic acids.
- 16. The composition of claim 15, wherein the proteins are chosen from milk proteins, plant proteins, and oat derivatives.
 - 17. The composition of claim 16, wherein the milk proteins comprise lactalbumin.
- 18. The composition of claim 16, wherein the plant proteins comprise soybean protein.
 - 19. The composition of claim 15, wherein the nucleic acids comprise DNA.
- 20. The composition of claim 1, provided in a form chosen from: solutions chosen from aqueous, aqueous-alcoholic, and oily solutions; emulsions chosen from oil-inwater, water-in-oil, and multiple emulsions, the emulsions having a consistency chosen from liquid and semi-liquid milk consistencies, and soft, semi-solid and solid cream

consistency; gels chosen from aqueous and oily gels; anhydrous products chosen from liquid, pasty and solid anhydrous products; lotion and serum dispersions chosen from aqueous dispersions, oily dispersions, and dispersions in a solvent medium; microemulsions; microcapsules; ionic and nonionic dispersions chosen from microparticles and vesicular dispersions; fluid, thickened, gelled, semi-solid, and soft paste forms; solid forms chosen from sticks and tubes; white creams, coloured creams, ointments, milks, lotions, serums, pastes, and mousses; and aerosols.

- 21. The composition of claim 1, provided in a form chosen from:
- (i) products for protecting and caring for the skin of the face, the neck, the hands and the body;
 - (ii) make-up compositions for body and facial skin;
 - (iii) antisun compositions; and
 - (iv) artificial tanning compositions.
- 22. The composition of claim 21, wherein the products (i) are chosen from antiwrinkle and anti-fatigue compositions, for making the skin look radiant.
- 23. The composition of claim 21, wherein the make-up compositions (ii) are chosen from lipsticks, foundations, tinted creams, and concealer sticks.
- 24. The composition of claim 1, provided in the form chosen from anti-wrinkle compositions for the skin of the face and the neck.
- 25. A method for reducing, fading out and/or smoothing out wrinkles and/or fine lines in skin, comprising:

applying to the skin a composition comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):

$$R_{1} - X - \begin{pmatrix} O \\ II \\ C \end{pmatrix} - CH - N - \begin{pmatrix} II \\ II \\ R_{2} \end{pmatrix} - R_{3}$$
 (I)

in which:

- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C₁-C₆ hydrocarbon-based radicals,
 - R₁ is chosen from:
 - (i) hydrogen,
- (ii) linear and branched, saturated and unsaturated C₁-C₄₀ hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R", wherein R' and R" are chosen, independently of each other, from hydrogen, and linear and branched, saturated and unsaturated C₁-C₆ hydrocarbon-based radicals; the C₁-C₄₀ hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and
 - (iii) a radical chosen from

- m is 1, 2, 3, 4 or 5;
- s is an integer between 0 and 4 inclusive;
- R₄ is chosen from hydrogen, -NH₂, -OH, -SH, -CHOHCH₃, -CONH₂,

- R₂ is chosen from hydrogen, linear and branched, saturated and unsaturated C₁-C₈ hydrocarbon-based radicals, and radicals chosen from –CH₂OH, -CHOH-CH₃, -CH₂C₆H₅, -CH₂C₆H₄p-OH and –(CH₂)_t-NH₂, with t being 1, 2, 3, 4 or 5,
- R_3 is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals, and
- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.
- 26. A method of manufacturing a pharmaceutical composition for reducing, fading out and/or smoothing out wrinkles and/or fine lines in skin, comprising:

adding to a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):

$$R_{1} - X - \begin{pmatrix} O \\ II \\ C - CH - N - \\ I \\ R_{2} - R_{3} \end{pmatrix} H \qquad (I)$$

- X is chosen from –O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C₁-C₆ hydrocarbon-based radicals,
 - R₁ is chosen from:
 - (i) hydrogen,
- (ii) linear and branched, saturated and unsaturated C_1 - C_{40} hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R", wherein R' and R" are chosen, independently of each other, from hydrogen and linear and

branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals; the C_1 - C_{40} hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and

(iii) a radical chosen from

- m is 1, 2, 3, 4 or 5;
- s is an integer between 0 and 4 inclusive;
- R₄ is chosen from hydrogen, -NH₂, -OH, -SH, -CHOHCH₃, -CONH₂,

$$-NH-C$$
, HN , HN , $-C_6H_5$ and $-C_6H_5$ p-OH,

- R_2 is chosen from hydrogen, linear and branched, saturated and unsaturated C_1 - C_8 hydrocarbon-based radicals, and radicals chosen from -CH₂OH, -CHOH-CH₃, -CH₂C₆H₅, -CH₂C₆H₄p-OH and -(CH₂)_t-NH₂, with t being 1, 2, 3, 4 or 5,
- R_3 is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals, and
- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.
- 27. A tensioning agent for reducing, smoothing out and/or fading out wrinkles and/or fine lines in skin, comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):

$$R_{1} - X - \begin{pmatrix} O \\ II \\ C \end{pmatrix} - \begin{pmatrix} CH - N \\ I \\ R_{2} \end{pmatrix} - \begin{pmatrix} II \\ R_{3} \end{pmatrix}$$
 (I)

in which:

- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals,
 - R₁ is chosen from:
 - (i) hydrogen,
- (ii) linear and branched, saturated and unsaturated C_1 - C_{40} hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R", wherein R' and R" are chosen, independently of each other, from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals; the C_1 - C_{40} hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and
 - (iii) a radical chosen from

- m is 1, 2, 3, 4 or 5;
- s is an integer between 0 and 4 inclusive;

- R₄ is chosen from hydrogen, -NH₂, -OH, -SH, -CHOHCH₃, -CONH₂,

- R_2 is chosen from hydrogen, linear and branched, saturated and unsaturated C_1 - C_8 hydrocarbon-based radicals, and radicals chosen from $-CH_2OH$, $-CHOH-CH_3$, $-CH_2C_6H_5$, $-CH_2C_6H_4p$ -OH and $-(CH_2)_t$ -NH₂, with t being 1, 2, 3, 4 or 5,
- R_3 is chosen from hydrogen and linear and branched, saturated and unsaturated C_1 - C_6 hydrocarbon-based radicals, and
- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.